



# Bandelier National Monument Fire Management



Summer/Fall 2006

**"We have been mechanically thinning and pile burning along Highway 4 for the past 3 years. The next step at Bandelier is to use prescribed burns to reduce our fuels and provide buffers to our neighbors. We have too much fuel in many hard to reach canyons. We cannot let these become pathways for wildfires to travel into surrounding communities. We know that this is an issue that must be addressed collaboratively and with the full support of the community."**

***Darlene Koontz, Superintendent of Bandelier National Monument***

**B**est known for mesas, sheer-walled canyons, and the many Ancestral Pueblo dwellings found among them, Bandelier includes 33,677 acres of public land including over 23,000 acres of wilderness. To continue our efforts to protect adjoining public and private lands from wildfires and to preserve this special place, Bandelier and other interagency partners are planning to conduct prescribed burns in the autumn of 2006. 733-acres in Upper Frijoles and 563-acres on the mesa are scheduled to be burned. After more than 100 years of fire suppression, fuels have built up within Bandelier National Monument and many other public lands to dangerous levels. Adding to that danger is the fact that Bandelier exists in an area with the second highest incidence of lightning strikes in the nation, increasing

the potential for wildland fire for the park and its neighbors. Prescribed burns are an important part of forest management and will be used with mechanical thinning to restore a sustainable forest. These prescribed fires will help to establish a critical buffer zone between highly fire-vulnerable areas within the park and the Los Alamos National Security, the Valles Caldera National Preserve, the City of Los Alamos, and other adjacent lands.



Mechanical thinning in 2005-102 acres on the east side of Forest Service Road 289 were mechanically thinned. Fuels were piled and burned in November/December 2005. Maintenance of previously thinned road corridors. The north side of highway 4 and the Monument's entrance road were re-treated in 2005.

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Planning for the Upper Frijoles Prescribed Fire in 2006 has been completed and interagency partners have reviewed the burn plan. A highly trained and specialized prescribed burn management team will be overseeing the prescribed burn, with over 100 trained firefighter staffing the burn.

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## What is Fire Management?

**B**andelier's Fire Management Program has evolved from one of suppressing fire to one of managing fire. Managing fire involves mechanical thinning, pile burning, prescribed burning, and suppression. Suppression will always be done. All fires that pose a threat to public safety or to irreplaceable natural or cultural resources are suppressed using an appropriate management response. The appropriate response is determined by considering a number of factors including the location of the fire, firefighter safety, values at risk, fuel types, and weather conditions. In addition to fire suppression the Bandelier Fire Management Program does fuels management and fire ecology work. Fuels management includes both thinning and prescribed fire. Over time the goal is to restore a healthy, low fuel forest using both thinning and fire. Fire ecologists study the fires and the thinning treatments over time, and help determine if projects are meeting their intended objectives.

**For more information about the Bandelier Fire Management program go to [www.nps.gov/band](http://www.nps.gov/band) or call (505) 662-7065.**

# 2006 Fire Management Program Treatment Plans

## Bandelier's Fire Management Program is planning a number of fuels management activities in 2006:

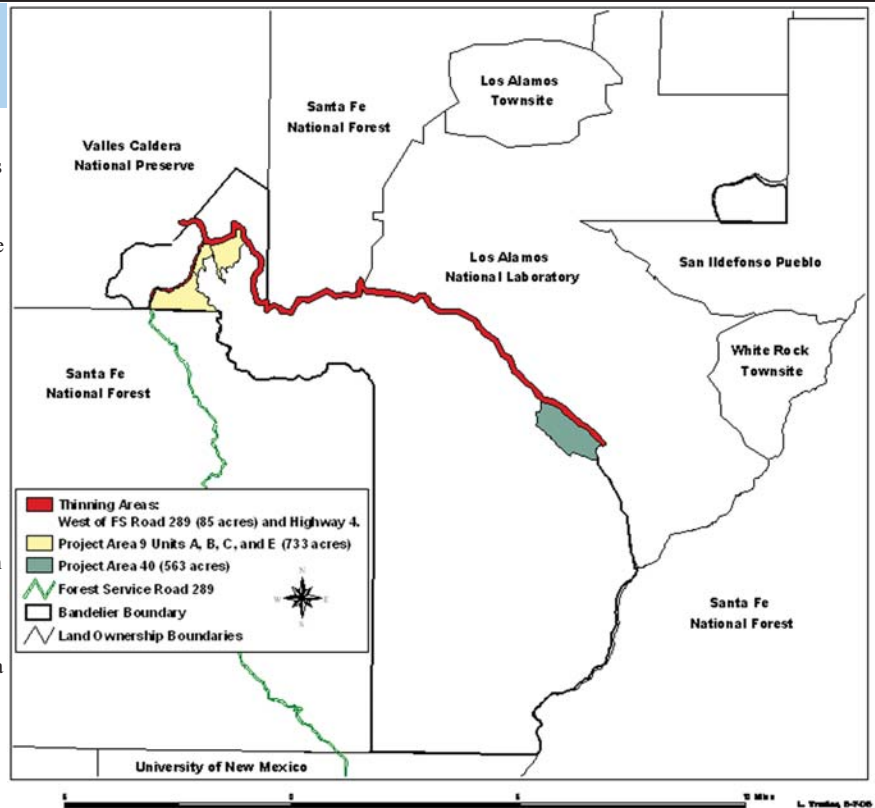
### Mechanical Thinning

- ♦ On the west side of Forest Service Road 289, 85 acres will be thinned.
- ♦ The previously thinned road corridor on the south side of Highway 4 will continue to be maintained.

### Prescribed Fires

- ♦ 733 acres in Upper Frijoles Project Area 9 will be burned.
- ♦ 563 acres will be burned in Project Area 40, this includes the mesa housing, amphitheater, and Juniper campground.

Both prescribed fires will be implemented in the fall or early winter under appropriate weather conditions, such as higher humidity and low winds. Bandelier and other interagency partners will only burn when fire conditions are determined to be safe and effective, and only for as long as it takes to do it correctly--possibly from a few days to a few weeks. Smoke is likely to be present for up to 2 weeks and commuters should expect heavy smoke and possible traffic delays during the actual burning.



Prior to the ignition of the prescribed fire, all resources will be on site. Resources will include firefighters from the Bandelier Fire Management staff, Los Alamos County Fire Department, Sandoval County, and the Santa Fe National Forest. Support resources will be provided by Bandelier and other National Park units. Site preparations to be completed

include installation of water hoses along the perimeter, on-going monitoring of on-site weather conditions, and careful placement of trained personnel. The actual burning is expected to take two to four days for each burn, although site mop-up will be on-going for several weeks.

### Local Area Fire Information

To report a fire call 911.

Remember the following website and phone numbers when you have questions about wildfires, prescribed fires, or fire restrictions.

- ♦ Santa Fe National Forest 1-877-971-FIRE (3473)
- ♦ Fire restrictions information call 1-877-864-6985
- ♦ For more fire information go to [www.nmfireinfo.com](http://www.nmfireinfo.com)

### Two Tools of Fuel Management

Two methods of forest fuel management are prescribed burning and mechanical thinning. Prescribed burns are intentionally lit under predetermined conditions. These include both pile burning, where fuel is cut and moved to a central location and burned, and/or broadcast burning, where fires are ignited within a predefined area and allowed to move through the vegetation within those boundaries. Prescribed burning treatments implemented over a long period of time will

create healthy and sustainable, low fuel forests that will burn at low, natural intensities. Mechanical thinning is the method which requires removing live and dead vegetation (fuels) with hand tools and mechanical equipment according to a prescribed plan. Mechanical thinning is often used as a pre-treatment for prescribed burning to remove smaller diameter trees, ladder fuels, shrubs, and ground litter to help keep the fire within the designated areas. Topography often limits the

extent to which mechanical thinning can be utilized. Used together, these methods are the best way to create buffer zones and healthy and sustainable forests.



## Who are our Interagency Partners?

**B**andelier Fire Management is located at Technical Area 49 (TA-49) on Department of Energy Land co-located with the Santa Fe National Forest and Los Alamos National Security. This interagency collaboration helps to increase, coordination, and cooperation between agencies for all fire and fuel mitigation operations. The fire managers at Bandelier are also members of the Santa Fe Zone Board and are heavily involved with the local Los Alamos County Interagency Wildfire Management Team (IWMT). The Santa Fe Zone is an interagency group with overall responsibility for coordination of the fire and incident management activities of agencies represented in a geographical



zone, including; the Santa Fe National Forest, Bureau of Land Management, National Park Service, US Fish and Wildlife Service, Bureau of Indian Affairs and the State of New Mexico.

The Interagency Wildfire Management Team (IWMT) was formed in April 1996 in

the wake of the Dome Fire. The IWMT serves as a crosscutting team to identify, discuss and coordinate issues pertaining to wildfire mitigation and management in the Los Alamos area. The emphasis of the team is to take hands-on action needed to protect human life,

improve firefighting safety, improve firefighting access, protect property, and maintain forest health. Bandelier Fire Management works closely on a daily basis with it's interagency partners.



*A fire caused by a cigarette at Tsankawi in the Summer of 2005 was extinguished safely and successfully with the help of Interagency Partners.*

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## Capulin Fire-May 21, 2006



*Capulin Fire as seen from the Entrance Road. Photo by Ranger Sally King*

**A**t 12:30 pm on Sunday, May 21, 2006, smoke was reported in a remote canyon in the wilderness of Bandelier National Monument.

Burning in a side drainage off Capulin Canyon in dispersed piñon-juniper, ponderosa pine and grasses, the fire grew to 124

acres. Initial attack efforts by air tankers and helicopters kept the fire out of the heavier fuels in nearby canyons. The immediate placement of hotshot crews along the fire's edges and the absence of wind enabled the fire to be 80% contained by early Monday morning. Resource advisors were flown in to guide the placement of fire lines away from archeological resources. Impacts to cultural resources in the area are expected to be minimal due to good firefighting efforts. Backcountry hikers were evacuated from the area and the backcountry remained closed until all activities related to the fire ceased. Despite 40 MPH winds on May 22, the fire was 100% contained with crews monitoring and completing mop-up. The cause of the fire appeared to be lightning.

Rehabilitation within the burned area is on-going. Hiking on designated trails is permitted in the burned area, although the off-trail sections will remain closed until the rehabilitation is complete.

The successful outcome of this wildfire was a result of good cooperative relationships with our fire partners.



**Investigating Fire Ecology in Ponderosa Pine Forests is available for teachers. It is a field guide that was created for 6th grade teachers by the Volunteer Task Force partnership with the National Park Service at Bandelier National Monument. For more information please contact the Visitor Center at (505) 672-3861 x517. 3**

***“Do your part, don't let a wildfire start!”***



# Kids Page



Wildfires can be devastating. Bandelier National Monument protects not only the cultural resources of this area but also the natural resources. By learning about fire and how it behaves, we can help our area become healthy once again. If wildfires do start, we want to be prepared to make the best decisions to protect people and our amazing landscape!

## Did you know? Fire Facts

- ♦ Fires have burned across the earth for millions of years. Evidence of fires that burned in the past exists today in petrified trees. Some petrified trees have fossilized charcoal in their trunks!
- ♦ Humans start approximately 90% of wildland fires! Lightning and lava start the remaining 10% of wildland fires.
- ♦ Lightning strikes the Earth about 100 times each second.
- ♦ Lightning temperatures can sometimes reach more than 50,000°F (28,000°C). That's more than five times hotter than the sun's surface! Imagine what happens when lightning strikes a field of dry grass.
- ♦ Each year more than 100,000 wildland fires occur in the United States. One is probably burning somewhere while you read this.
- ♦ Warm, dry winds called Chinook Winds (pronounced *shin-ook*) occur on the eastern slopes of the Rocky Mountains and can help cause severe fire hazard conditions. These winds can blow more than 100 miles per hour.
- ♦ Temperatures of fuels such as wood found in an open field may be warmed to as much as 160°F by the sun.
- ♦ Between 1996 and 2003, 40,704 wildfires burned 3,152,770 acres of forest in New Mexico and Arizona. That is enough burned forest to cover the entire state of Connecticut.

## Can you name the three parts of the fire triangle?



*Are you in grades K-6? If so, send us your best drawing of a wildland firefighter! The winning entry will be featured in the next edition of this newsletter and win a 90th Anniversary T-Shirt. Use the space below, or send in your entry on an 8 1/2"x 11" piece of paper.*

*Entries will be judged by a panel of firefighter and Bandelier employees. The winning picture will be featured in our next Bandelier Fire Management Update newsletter. Remember to include your name, age, grade and what school you attend. All entries should be submitted by September 30, 2006.*

Send entries to: Fire Management Office  
Bandelier National Monument  
15 Entrance Road  
Los Alamos, NM 87544

Answer: Fire is a simple chemical reaction that requires three components. The three parts of the fire triangle are ***fuel, heat and oxygen***. By removing any of the components you no longer have fire. This is true for something as small as a burning candle or as large as a raging wildfire.



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